tech.mit.edu

Volume 134, Number 46



WEATHER, p. 2

TUE: 72° F | 62° F

Mostly sunny

WED: 76° F | 61° F

Partly cloudy

THU: 72° F | 60° F

Tuesday, October 14, 2014

With growing edX role, some students skeptical

Students mixed on blended models, but some profs. foresee more online integration

By Sanjana Shrivastava

Some MIT classes, using edX, have moved toward a blended model of education, integrating in-person and online learning. According to both students and instructors, this effort has made students' college experience more flexible, but not without other flaws.

Online education has been at the forefront of the administration's efforts this semester. The Institute-wide task force on the future of MIT's education recently released their report encouraging "online and blended learning models to improve graduate curriculum accessibility." According to the task force, this blended model provides "commitment to access and affordability."

Prof. Anant Agarwal, CEO of edX, and

Prof. Eric Klopfer, professor of science education and engineering systems and director of the Scheller Teacher Education program, both support the conclusions drawn by the task report. Integrated classes allow students to have both access to professors and fellow students and "augment whatever they are doing in a traditional setting," according to Agarwal in an interview with *The Tech*.

Students, however, seem to be less certain about online education. First-year MIT students interviewed expressed differing opinions on what types of classes should contain an online component.

Anuhya Vajapeyajula '18, who took online Latin, government, and health classes, stated there is a tradeoff between the flex-

Online Education, Page 6

Pink Team Pride



LANDON CARTER—THE TECH

The 2.009 pink team takes a selfie at the end of one of the many challenges of the semester on October 3, racing vehicles of their own design to retrieve treasure from across the lava field of Killian Court. Though the pink team finished last, they won the team spirit award.

The Seasons come to Kresge



Francesco Manara leads the Cameristi della Scala chamber orchestra in a performance at Kresge Auditorium last Wednesday. Eight seasons were played in sequence, merging Vivaldi's classical concerto and Piazzolla's tango across over two centuries and two hemispheres.

IN SHORT

MIT Libraries is seeking input from MIT students on renovations to library spaces. A discussion will occur on Oct. 14 at 7 p.m. Register here: http://bit.ly/MITLibraryIdeas

Flu shots will be available on Thursday, Oct. 16 on the

second floor of W20 from 10 a.m. to 4 p.m.

Shred IT Day is on Friday, Oct. 24. Items dropped in the Building 32 lobby from 10 a.m. to 2 p.m. will be securely shredded.

Send news information and tips to news@tech.mit.edu.

Three MIT research teams receive Department of Energy awards

The U.S. Department of Energy's Nuclear Energy University Programs (NEUP) awarded five million dollars to an integrated research project led by Professor Charles W. Forsberg ScD '74 of the department of nuclear science and engineering. Forsberg, NSE Professor Lin-wen Hu, and collaborators from University of California at Berkeley and University of Wisconsin at Madison received extended funding for their commer-

cial high-temperature salt-cooled reactor, according to the MIT News Office.

Additionally, Benoit Forget, associate professor of nuclear science and engineering, and Kord Smith, the Korea Electric Power Company Professor of the Practice of Nuclear Science and Engineering, obtained a \$400,000 grant in a separate NEUP Research and Development Award for developing Benchmarks for Eval-

uation and Validation for Reactor Simulations (BEAVRS) to allow for validation of the accuracy of physics computation tools.

Mechanical engineering professor Alexander Slocum also received a \$400,000 grant from the NEUP initiative in order to develop a seawater uranium extraction system that uses the infrastructure and power of offshore windmills.

—Amy Wang

Doctors confirm Braintree facility patient does not have Ebola virus

Ebola scare triggers mounted response from health teams

By Meghan E. Irons and Todd Wallack

THE BOSTON GLOBE

Fears about the deadly Ebola virus spread to Massachusetts this Columbus Day weekend, prompting holiday press conferences and reverse 911 calls to reassure a jittery public after two Ebola-related scares

On Sunday, when a man who had traveled to Liberia showed up at a Braintree clinic with flulike symptoms, he triggered a full hazmat response, and was escorted by police to a Boston hospital in an ambulance, while his car was plastered with orange biohazard signs to keep people away.

Then, on Monday, a team dressed in yellow protective suits quickly surrounded and boarded an Emirates flight from Dubai at Logan International Airport after several people on board exhibited flulike symptoms, sparking fears they might have the dreaded disease that is sweeping parts of West Africa.

The incidents followed news of the first Ebola death in the United States, in

Texas, and the infection of that patient's

Suddenly, a disease that seemed thousands of miles away has spread inside US borders.

"We have a large outbreak of anxiety and it is as real as the Ebola threat," said William Schaffner, a national infectious disease specialist at Vanderbilt Medical Center in Nashville. "The chances of getting Ebola are very small, but the public does not see it that way."

The city has already quietly dealt with three to four other suspected cases of Ebola in recent months, none of which actually turned out to be Ebola, health officials said Monday. Instead, the patients had other diseases common in West Africa, such as typhoid and malaria.

"They were treated with appropriate personal protective equipment," said Dr. Anita Barry, who heads the infectious disease bureau of the Boston Public Health Commission, "and they went back to living their lives."

The two weekend scares also appear to be unfounded. Monday night,

a spokeswoman for Beth Israel Deaconess Medical Center said it had "determined with certainty" that the man treated in Braintree does not have Ebola. Also Monday night, the Boston Public Health Commission issued a statement saying that the patients who arrived on Emirates Flight 237 "do not meet the criteria for any infections of public health concern, including Ebola" or several other diseases.

On Tuesday morning, Governor Deval Patrick was scheduled to receive an Ebola preparedness briefing from public health officials and airport personnel.

As public worries intensified over the long weekend, Boston public health officials called a news conference on the Monday holiday to assure residents that Boston hospitals are prepared if an actual case of Ebola eventually turns up. They also wanted to tamp down fears that the disease could spread even if it reaches the region.

Unlike many other diseases, Ebola

Ebola, Page 8

KEEP THE DOORS

S3 Dean Randall on continuing the discussion.

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FIELD HOCKEY WINS

MIT field hockey beats Wheaton by one goal. **SPORTS, p. 11**

WOMEN'S SOCCER VICTORY

MIT wins with single overtime goal. **SPORTS**, **p**. **11**



YELLOWSAIL

Pop-punkers release ninth studio album despite tough

ARTS, p. 9

PAPER TEST WOES

Brought to you by Q.E.D. **FUN, p. 5**

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North Korean leader Kim Jong Un reported to have appeared in public

Kim Jong Un, the North Korean leader whose unexplained absence from public view for more than a month raised intense speculation that he was ill or deposed, apparently has been seen.

The official Korean Central News Agency said Tuesday that Kim had given "field guidance" at a newly constructed scientific complex. The agency did not specify when Kim, 31, made the visit, but South Korean media speculated that it was on Monday.

Kim, the grandson of North Korea's founder, Kim Il Sung, had not been spotted since Sept. 3, after having made a series of

In the opaque politics of North Korea, the world's most isolated country, Kim's prolonged absence inevitably invited rumors that he had been replaced in a power struggle or was ill, or both.

The last time he was seen, in a television broadcast in late September, Kim walked with a pronounced limp, and North Korea's state-run press said he was not feeling well.

-Rick Gladstone, The New York Times

Hong Kong protesters reinforce barriers

 $\operatorname{HONG}\operatorname{KONG}\operatorname{--Monday}\operatorname{began}\operatorname{with}\operatorname{attempts}\operatorname{to}\operatorname{tear}\operatorname{down}$ the barriers around the protesters' main camp. It ended with thousands of supporters of the protests swarming onto downtown streets and helping to erect stronger barriers.

Bankers, builders, engineers and smartly dressed office workers were among the surge of people who gathered deep into the night to keep the police from squeezing the student-led protests out of the three major areas of the city they have clogged

"This is to protect our democracy, to protect our future," said Patrick Chan, an accountant, taking a brief break from helping to raise an elaborate fortress of bamboo and plastic binding on the edge of Central, the city's main financial district.

Actions by the police and threats from opponents against the protesters have repeatedly backfired, making the pro-democracy demonstrators more determined to hold fast.

This time, police attempts to pare back protesters' barricades brought out the supporters who built yet more barricades, using bamboo poles, garbage cans, concrete, bus-stop signs and even large potted plants and carpet scavenged from office

The police effort to remove some barricades in the Admiralty and Central areas of the city began before dawn on Monday, taking sleeping protesters by surprise.

The police cleared at least one important downtown artery but left the protest camp untouched.

Supporters of the pro-democracy protests regained the upper hand in the evening.

At Mong Kok, on the other side of Victoria Harbor, volunteers used crates and bamboo poles to reinforce their barriers.

Hong Kong police equipped with heavy steel shears began cutting plastic ties and dismantling barricades on Tuesday morning in one of the city's busiest shopping areas, Causeway Bay, but there was little sign of resistance or arrests.

"This is not clearing the site; please leave for your own safety," officers said through loudspeakers.

A police spokesman said some barricades needed to be removed because they had been enlarged overnight and made

heavier with the use of cement. "If there are ill or injured people, an ambulance might not be able to get through," he said.

Many Hong Kong residents see the Chinese government's rejection of democracy for their city as an affront to their values, and feel that the special status they have had since Hong Kong returned to Chinese sovereignty in 1997 is under threat.

—Chris Buckley and Michael Forsythe, The New York Times

British Parliament recognizes Palestinian state

By Stephen Castle and Jodi Rudoren

THE NEW YORK TIMES

LONDON - Against a backdrop of growing impatience across Europe with Israeli policy, Britain's Parliament overwhelmingly passed a nonbinding resolution Monday night to give diplomatic recognition to a Palestinian state. The vote was a symbolic but potent indication of how public opinion has shifted since the breakdown of American-sponsored peace negotiations and the conflict in Gaza this summer.

Though the outcome of the parliamentary vote, 274-12, was not binding on the British government, the debate was the latest evidence of how support for Israeli policies, even among staunch allies of Israel, is giving way to more calibrated positions and in some cases frustrated expressions of opposition to Prime Minister Benjamin Netanyahu's stance toward the Palestinians.

Opening the debate, Grahame Morris, the Labour Party lawmaker who promoted it, said Britain had a "historic opportunity" to take "this small but symbolically important step" of recognition.

"To make our recognition of Palestine dependent on Israel's agreement would be to grant Israel a veto over Palestinian self-determination," said Morris, who leads a group called Labour Friends of Palestine.

Richard Ottaway, a Conservative lawmaker and chairman of the House of Commons foreign affairs committee, said that he had "stood by Israel through thick and thin, through the good years and the bad," but now realized "in truth, looking back over the past 20 years, that Israel has been slowly drifting away from world public opinion.

"Under normal circumstances," he said, "I would oppose the motion tonight; but such is my anger over Israel's behavior in recent months that I will not oppose the motion. I have to say to the government of Israel that if they are losing people like me, they will be losing a lot of people.

The breakdown of negotiations over a two-state solution, continuing Israeli settlement building and the bloody conflict in Gaza all appear to have jolted Europe's politicians, including Sweden's new prime minister, Stefan Lofven, who this month pledged to recognize Palestine, the first time a major Western European nation had done so.

Paul Hirschson, a spokesman for Israel's Foreign Ministry, said that moves like the British resolution and Sweden's recent statement "make conflict resolution much more difficult" by sending Palestinians the message that "they can achieve things" outside negotiations. Israel, the United States and most of Europe have long insisted that the only path to Palestinian statehood was through bilateral negotiations.

Prime Minister David Cameron's government opposes recognizing a Palestinian state at this

The parliamentary debate and vote are not likely to change British policy.

Egypt cracks down on new student protests

By David D. Kirkpatrick

CAIRO — Egyptian security forces are tightening their crackdown on student activism by arresting scores of students at the start of the school term in an effort to crush a renewed wave of protests against the militarybacked government that took power last year.

Mohamed Atef, the president of the student union at Al Azhar University in Cairo and the founder of Students Against the Coup, said the police raided his family home in Assiut at 3 a.m. Monday looking for him and arrested his brother.

At least 91 students have been arrested in Egypt since Friday, according to the Association for Freedom of Thought and Expression, which has chapters on campuses across the

Universities are some of the last pockets of visible opposition to the military-backed government outside of the relatively lawless Sinai Peninsula, where militant Islamist groups are waging a campaign of guerrilla attacks against security forces.

The campuses, though, have a special significance in Egypt. They have also been seedbeds for the collaboration among Islamist and leftleaning youth groups, who together led the 2011 uprising against former President Hosni Mubarak. After the military took power in the summer of 2013, student protests all but shut down classes at several major universities for most of the school year, continuing even after other street protests were crushed. At least 14 students were killed in clashes with police, and thousands were arrested; more than 900 remain in prison more than a year later, according to the association.

President Abdel-Fattah el-Sissi, who led the military takeover, reacted to the protests with an edict giving himself personal authority to appoint university presidents and department heads. Applicants for student housing were screened by the interior ministry. The country's security forces were given new access to campuses, while a private security force got a contract to operate metal detectors and search arriving

Even so, fresh protests broke out at several universities as soon as they reopened Sunday. Students Against the Coup, a national coalition of groups, posted videos denouncing the detentions, the new security measures and infringements on academic freedom, as well as the ouster of the elected president, Mohammed Morsi of the Muslim Brotherhood.

The country's higher education minister, Al Sayed Abdul Khaliq, vowed in a television interview on Sunday that he would "immediately" expel any student or faculty member who took part in a protest.

Warm air precedes lateweek storm

By Vince Agard

STAFF METEOROLOGIST

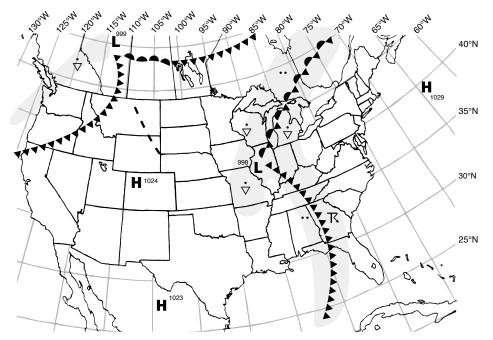
The storm system that spawned severe thunderstorms and possible tornadoes over the Mississippi River Valley yesterday will arrive in New England later this week, bringing the potential for heavy rainfall to the Institute on Thursday and Thursday night. Until then, the Boston area will be wedged between an offshore high pressure system and the approaching cold front. This setup will result in considerable pre-frontal warming, with temperatures expected to exceed 70°F (21°C) on each remaining day this week, whereas normal highs for this time of year are around 62°F

Meanwhile, Hurricane Gonzalo has become the 6th tropical cyclone to attain hurricane strength in the Atlantic basin this year. While Gonzalo is currently situated to the east of Puerto Rico, the storm is forecast to intensify as it moves northeast before curving back toward Bermuda by the end of the week. If Gonzalo reaches Category 3 status (sustained winds of at least 111 mph), it would be the second Atlantic major hurricane of 2014.

Extended Forecast

Today: Afternoon sunshine. High 72°F (22°C). Winds SW at 5-10 Tonight: Partly cloudy. Low 62°F (17°C). Winds S at 5-10 mph.

Tomorrow: Partly cloudy. High 76°F (24°C). Winds S at 10-12 mph. Thursday: Rain, becoming heavy at times. High low 70s°F (22°C). Friday: A chance of morning showers, then becoming sunny. High



Situation for Noon Eastern Time, Tuesday, October 14, 2014

Weather Systems	Weather Fronts	Precipita	tion Sy	mbols	Other Symbols
			Snow	Rain	Fog
High Pressure		Showers	*	$\dot{\nabla}$	T. Thunderstorm
Low Pressure	Warm Front	Light	*	•	W Haze
<u></u>	▲▲▲▲ Cold Front	Moderate	**	••	Compiled by MIT
§ Hurricane	Stationary Front	Heavy	**	:.	Meteorology Staff and The Tech

Republican-majority Senate is starting to look likelier

By Nate Cohn

THE NEW YORK TIMES

The polls have shown Republicans faring quite well over the last couple of weeks, and they now appear to lead in the polls in enough contests to win 52 seats, with Iowa, Colorado and the six Democraticheld states won by John McCain in the 2008 presidential election and Mitt Romney in 2012.

The Democrats still have a plausible path to victory. But if the next week of polling, particularly in Colorado and Iowa, looks like the last few weeks, then the Republicans will solidify a clear advantage heading into the final stretch.

The Republicans have a solid grasp on 44 seats, and the Democrats on 45 seats. Republicans need to win seven of the remaining seats to take control. Here is a look at them.

Republicans have emerged as clear favorites in three states where they easily win presidential elections and where Democratic incumbents are trying to hold on: Alaska, Arkansas and Louisiana.

The polls themselves are clear:

Sen. Mark Begich has trailed the Republican, Dan Sullivan, in every nonpartisan poll over the last month and a half. But if the Republicans were to choose a state to have a clear lead, Alaska wouldn't be it.

The state has a long history of polling misfires, perhaps because of its small and dispersed population.

For most of the year, analysts assumed that the Republicans would hold all of their seats, including Georgia and Kentucky, where Democrats had slight chances at an upset. They were also thought to be assured to win three red states where Democratic incumbents were retiring: Montana, West Virginia and South Dakota.

In Kansas, Greg Orman, a businessman turned independent candidate, and Sen. Pat Roberts, a Republican, are locked in a tight race. Orman still leads in most polls, but some polls now show Roberts with a slight lead. That's a change from a month ago, and it could suggest that the state's undecided, predominantly Republican-leaning voters are breaking his way.

Another wild card is South Da-

kota. Mike Rounds, the Republican nominee and a former governor, was thought to be a strong candidate for the state's open seat. But he has been embroiled in a scandal over the state's EB-5 visa program, which was expanded when he was governor.

If the Republicans lose South Dakota or Kansas, they will need to flip a state won by Obama to win the Senate — even if they win Alaska, Arkansas and Louisiana.

At the moment, Iowa is a strong candidate to offset a Republican loss in Kansas or South Dakota. But Iowa also helps highlight the uncertainty in the campaign.

It would be hard to describe Iowa as part of a GOP firewall. Over the last few weeks, there are nearly as many polls showing a tied race or the Democrat ahead as there are polls showing the Republican in the lead.

Overall, Leo, The Upshot's Senate model, gives the Republicans a 68 percent chance of retaking the Senate.

That reflects the GOP's edge, but also the reality that they haven't yet locked down the 51 seats they need for a majority.

Vatican signals more tolerance toward gays and divorce

By Elisabetta Povoledo and Laurie Goodstein

THE NEW YORK TIMES

VATICAN CITY — In a marked shift in tone likely to be discussed in parishes around the world, an assembly of Catholic bishops convened by Pope Francis at the Vatican released a preliminary document Monday calling for the church to welcome and accept gay people, unmarried couples and those who have divorced, as well as the children of these less traditional families.

The bishops' report, released midway through a landmark two-week meeting, does not change Roman Catholic doctrine or teaching.

The report will now be subjected to fierce debate and revision at the assembly.

But it is the first signal that the institutional church may follow the direction Francis has set in the first 18 months of his papacy,

away from condemnation of unconventional family situations and toward understanding, openness and mercy.

The 12-page report, written by a committee picked by Francis, says that without abandoning church teaching on the sacrament of marriage, pastors should recognize that there are "positive aspects of civil unions and cohabitation."

That is a striking departure from traditional Catholic preaching that such couples are "living in sin."

The report also says that gay people have "gifts and qualities to offer to the Christian community," and that some gay couples provide one another "mutual aid to the point of sacrifice" as well as "precious support in the life of the partners."

The document was read aloud to the nearly 200 bishops gathered at the synod, as the assembly is called.

lled. The reading was followed by responses and objections from 41 bishops in the synod hall, a portent of disputes to come.

Archbishop Bruno Forte, the synod's special secretary, said in a news conference afterward that while the church does not condone gay unions or gay marriage, it must "respect the dignity of every person."

"The fundamental idea is the centrality of the person independently of sexual orientation," he said.

The report will now be discussed and modified in the next week by working groups of bishops who will scrutinize each section, and then a final report will be issued after the synod to be disseminated and discussed in churches worldwide over the upcoming year.

There will be a second synod in Rome next October, but in the end, after all the consultation and debate, it is Pope Francis who will ultimately set the course.

Pentagon says global warming presents immediate security threat

By Coral Davenport

THE NEW YORK TIMES

WASHINGTON — The Pentagon released a report Monday asserting decisively that climate change poses an immediate threat to national security, with increased risks from terrorism, infectious disease, global poverty and food shortages. It also predicted rising demand for military disaster response as extreme weather creates more global humanitarian crises.

The report lays out a road map for how the military will adapt to rising sea levels, more violent storms and widespread droughts. The Defense Department will begin by integrating plans for climate change risks across all of its operations, from war games and strategic defense planning situations to a rethinking of the movement of supplies.

While foreign policy experts have for years warned that climate

change could present a future risk to national security, the Pentagon's characterization of climate change as a threat demanding immediate action represents a significant shift for the military.

In the past, the Pentagon's response to climate change has focused chiefly on preparing military installations to adapt to its effects, as in protecting coastal naval bases from rising sea levels. But the new report calls on the military to incorporate climate change into broader strategic thinking about high-risk regions — for example, the ways in which drought and food shortages might set off political unrest in the Middle East and Africa.

"One of the differences from previous documents is that they're really looking at the immediate threat," said Marcus King, an expert on climate change and international affairs at George Washington University. "The other is that they're not just looking at installations — they're looking at a different level, the strategic impact across regions."

If and when the Pentagon does request funding from Congress for spending on climate change initiatives, it will clash directly with congressional Republicans, many of whom question the established scientific evidence that human activities are causing climate change.

"ISIS is still gaining ground and causing havoc in Syria and Iraq, with foreign fighters from over 80 countries coming and going into the fight and then returning to their home country," said Sen. James Inhofe of Oklahoma, the ranking Republican on the Senate Armed Services Committee, of the Pentagon report. "It is disappointing, but not surprising, that the president and his administration would focus on climate change when there are other, legitimate threats in the world."

Election in Hungary tightens prime minister's hold on power

Prime Minister Viktor Orban continued his steady consolidation of power in Hungary in local and municipal elections on Sunday with his governing Fidesz party winning control of all county assemblies and all but one of the largest cities, including the capital, Budapest.

A coalition of left-leaning and socialist parties won in the fourth-largest city, Szeged, near the Serbian border.

Despite some indications of growing support for Hungary's far-right Jobbik party, it dominated only in a handful of small, rural municipalities.

The victory was the third straight triumph for Orban's rightwing party.

In April, he was returned to office following parliamentary elections in which Fidesz, for the second time, won a two-thirds majority, giving it the power to alter the Constitution.

And then in May, the party decisively won in voting for the European Parliament.

"Three is the Hungarian truth, and today we got the third, our third victory," Orban said in a brief victory speech Sunday night.

Here he was referring, as he often does, to a Hungarian folk saying, in this case a maxim taken from the Latin "omne trium perfectum," which means "everything that comes in threes is perfect"

"Hungary is a powerful country because at each vote, it managed to present a unity that is rare in Europe," the prime minister said, vowing to "make Hungary great in the next four years."

Orban faces no more elections until 2018, barring unforeseen events, and he is expected to use his political dominance to advance his conservative agenda.

"In my opinion, three major victories give them a consistent legitimacy, as it would anywhere in the world," said Julia Lakatos of the Center for Fair Political Analysis, an independent research group, in a phone interview from Budapest.

Orban, whose increasingly authoritarian rule has worried many Western leaders, drew criticism over the summer for a speech in which he declared his support for "illiberal democracy," pointing to the economic success of authoritarian states in China, Russia, Singapore and Turkey.

Party officials later said that this did not mean that Hungary intended to abandon democracy, but that it wanted to stem the kind of "cowboy capitalism" that led to the financial collapse in 2008.

The leftist coalition did poorly in Sunday's voting, in part, because it had grown increasingly fragmented.

Jobbik, which has tried in recent months to soften its image, did as well as the leftists in many large cities and beat them in some.

"They have become, symbolically, the second force behind Fidesz," Lakatos said. "But they could not get near Fidesz."

-Rick Lyman, The New York Times

Errors on Ebola raise concern: how prepared are hospitals?

Federal health officials have offered repeated assurances that most U.S. hospitals can safely treat Ebola, but Emory University Hospital in Atlanta, which had years of preparation for just such a crisis, found out how hard that is while it cared for three Ebola patients.

As doctors and nurses there worked to keep desperately ill patients alive, the county threatened to disconnect Emory from the sewer lines if Ebola wastes went down the drain.

The company that hauled medical trash to the incinerator refused to take anything used on an Ebola patient unless it was sterilized first. Couriers would not drive the patients' blood samples a few blocks away for testing at the Centers for Disease Control and Prevention. And pizza places would not even deliver to staff members in any part of the hospital.

"It doesn't matter how much you plan," Dr. Bruce Ribner, an infectious disease specialist who directed the patients' care, said in an interview. "You're going to be wrong half the time.

Emory solved its problems, but the challenges it faced could overwhelm a hospital with fewer resources.

Multiple mistakes at Texas Health Presbyterian Hospital in Dallas in treating a patient from Liberia — a delay in diagnosing the disease, and its spread to a health worker who had apparently taken all precautions — have raised questions about the general level of preparedness in hospitals around the country.

Medical experts have begun to suggest that it might be better to transfer patients to designated centers with special expertise in treating Ebola.

Federal health officials are also beginning to consider that idea, though they emphasize that every hospital has to be able to diagnose the disease.

During a news conference this month, Dr. Thomas R. Frieden, director of the Centers for Disease Control and Prevention, said: "Essentially, any hospital in the country can safely take care of Ebola. You need a private room with a private bathroom, and rigorous, meticulous training and materials to make sure that care is done safely so caregivers aren't at risk."

But on Sunday, after it was confirmed that a nurse in Dallas had been infected with Ebola, Frieden said his agency would consider whether patients should be transferred to specialty centers.

"We're looking at different options for what will be the safest way to care for patients," he said in an interview on Monday. But he declined to explain what those options were.

The nation has four hospitals with special biocontainment units to isolate patients with dangerous infectious diseases: in Bethesda, Maryland; Missoula, Montana; and Omaha, Nebraska, as well as Emory.

But other large hospitals around the country could also handle Ebola patients, Ribner said.

"I think the larger regional hospitals are where the care of these patients is going to have to be focused," Ribner said, adding that there is a long tradition in medicine of transferring critically ill patients from smaller hospitals to larger ones better equipped to care for them.

—Denise Grady, The New York Times



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GUEST COLUMN

Continuing the conversation

The doors need to stay open

By David Randall

When I first heard about the All Doors Open event, I was a little uncertain. I knew from my work in Student Support Services (S3) that our community was struggling to come to terms with a string of bad news, most recently the on-campus death of Phoebe Wang. We were given fifteen unstructured minutes, time to use however we chose. What would we make of it? My colleagues and I heard that some found the thought and experience of this undefined time awkward, long and intolerable. Others saw it as exactly what they needed.

What we observed in S3 was that "All Doors Open" represented an opportunity for a fresh start. It gave all of us in the MIT community a chance to catch our collective breath and become more direct about how we are feeling. Taking the time to stop, together, has started a conversation. In the time since All Doors Open, we have had a lot of conversations about important topics. As people talked, we listened and we learned.

Most importantly, we learned that people wanted to talk. People came to our office in larger numbers. They expressed concerns about friends, colleagues and loved ones whom they hadn't noticed were troubled, until the recent death heightened their awareness and sense of responsibility for others. They talked about tragedy, they talked about death, and they talked about suicide. Yes, I said the word... suicide. Many told us that they wished more had been said publicly about the causes of death in the announcements over the last year. While we can all understand that the Institute has a moral obligation to respect the wishes of families above all in these painful situations, especially in the immediate aftermath, over and over we heard that the pain of not knowing can feel overwhelming when a colleague, friend or community member has died so suddenly. In listening to these reactions, it is clear that suicide and mental health need to be a part of the campus conversation.

We learned a lot from students and about the impact that professors have on them in these moments of crisis. When professors spoke openly about the tragedies and responded flexibly to them, the effect on their students was profoundly positive. By the same token, not acknowledging a recent tragedy, or refusing to be flexible in responding to students who have genuinely been affected, gives students the impression that uncomfortable topics should be swept under the rug. If I could deliver only one message to our faculty, it would be this: You are powerful! You are the role models for our students, the focus of their highest admiration. When you acknowledge pain, confusion and tragedy, share your personal experience of them, give students the opportunity to discuss them, and think flexibly about how to adjust classroom expectations, the impacts can be long lasting and deep.

I have gotten feedback from professors, though, who aren't sure what to say to students about these sensitive subjects. They want more guidance, more direction. They are worried that they might make things worse. There is a need for clarity about how to handle classroom conversations when everyone feels at a loss. These crises serve as a reminder that, as basic as it sounds, professors are people too. Faculty members are not immune to being shaken, confused and unsure in the face of a tragedy. There needs to be better support for professors during these situations. Staff in my office consulted with many professors over the past few months, but the guidance needs to reach across the Institute in a sys-

We also heard that students are hesitant to talk openly with each other. They are comfortable talking about academics, or being "hosed." But they find it much harder to talk about their genuine strug-

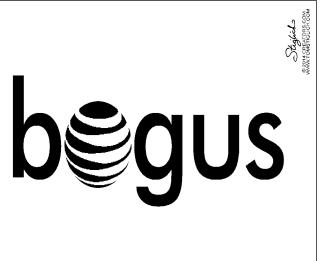
gles. When things feel overwhelming, it's less intimidating to isolate oneself than to seek help. Students also said they are reluctant to provide feedback about what could change on campus. They are either intimidated to talk to people in power or don't have confidence that their feedback will have much of an impact.

To all of you in the MIT student community: I encourage you to talk to each other about your struggles, but not just about the daily stuff like academics and research. I promise that if you share a little bit about yourself, you'll find others who struggle in similar ways. Keep having conversations with the administration about what we all could do differently. Don't stop; don't let the passage of time erode your resolve to make changes. Push us to think in creative, new, and bold ways about the MIT experience. Please remember, people are listening, and hearing the student voice is crucial to making positive change.

Finally, we heard from many, especially staff, that they are trying to make sense of the past year. We are absorbing a lot of bad news, not just at MIT but also in the world. We are hearing about illness, terrorism, and war. The wounds from the Boston Bombings and Sean Collier's murder are still fresh. People feel that it has been one thing after the other, and it is hard to process it all. This is a reminder to us all about the basic human value of kindness, empathy, and understanding.

MIT is famous for inventing the future. In this moment, though, we need to reflect on the past, acknowledge where we currently stand, and then, as a community, think of new ways to make MIT an even better place to live, work, and learn. Let's continue the conversation. Our door in S3, as always, is open and if you have thoughts on how we can better serve the community in this tough time please do not hesitate to stop by or contact me directly.

Associate Dean David Randall oversees Student Support Services.



AT&T to pay \$105 million for unauthorized charges on customer bills



CORRECTIONS

An article in the Friday, Oct. 10 issue about Maseeh Hall and DormCon incorrectly stated that Maseeh's residents

would pay a total of \$10,000 per year to DormCon in taxes if the dorm were a member of the body. In fact, it would pay \$5 per resident per semester, or about \$5,000 per year. This is not one third of Maseeh's budget.

The article also misstated the class years of Austin Fathman '15 (not '14) and Sydney E. Hodges '16 (not '15).

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Editorials are the official opinion of *The Tech*. They are written by the Editorial Board, which consists of Chairman Annia Pan, Editor in Chief Austin Hess, Managing Editor Judy Hsiang, and Opinion Editor Jacob London.

Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to *letters@tech.mit.edu*. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

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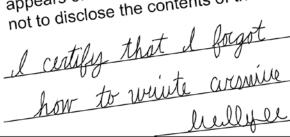
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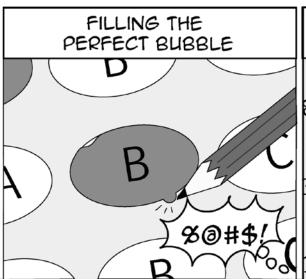
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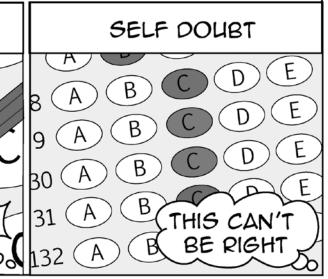
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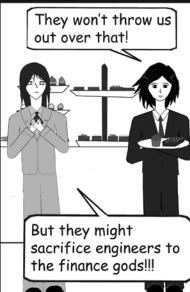


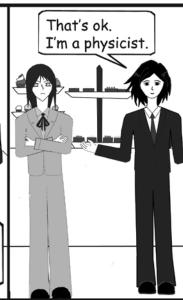
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Somewhere on the Search for Meaning... by Letitia Li









Saturday Stumper by Frank Longo

Solution, page 8

ACROSS

- 1 Left-leaning member of the board?
- 10 Straw-hat weave
- 15 Handy
- 16 Tubes to serve
- 17 Place for some super-fresh herbs
- 18 Metropolis on the Ganges 19 Sprout
- 20 "Old" combination
- 22 Imagine
- 23 Dig for dirt, maybe
- 25 Contract
- 27 Inflation indication: Abbr.
- 29 Tarantino called him "the future of horror"
- 30 Stubborn sort
- 33 Table-turning occasion
- 36 No lavman
- 37 The Bard's "venomous fool"
- 38 Petition
- 39 Work on the side
- 40 Tahlet makei
- 41 Put down
- 42 Capital near Lillestrøm

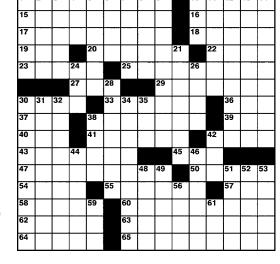
- 43 Spanish fish dish
- 45 L'Oréal Paris brand
- 47 Works with minimal weight
- 50 Not chilling
- 54 If not, to Nero
- 55 Surround closely
- 57 Word of apprehension
- 58 Eldest of a literary trio
- 60 Claustrophobe comforter
- 62 Lodging place
- 63 Lender in the S&P 500
- 64 Some flutes
- 65 Maleficent and such

DOWN

- 1 Jumps on, with "out"
- 2 Like a hawk
- 3 Ambitious
- 4 Sprout
- 5 Cutter cousins 6 Manicuring target
- 7 Heads of des
- 8 Anteater relative 9 L-shaped key

- 10 Indication to really tone it down?
 - 11 Premier, e.g.
 - 12 Pair on Namibia's coat of arms
 - 13 One way to coast
 - 14 Snap on a football field, perhaps
 - 21 Quaker State's early headquarters
 - 24 CIA array
 - 26 __ Museum (San Jose site honoring the boat people)
 - 28 Shut off
 - 30 Bolognese alternative
 - 31 \$50 bill depiction
 - 32 Gravity-defying feat
 - 34 1930s Safety Director of Cleveland
 - 35 SEC investigation target of 2005
 - 38 Draw in an outlet
 - 42 Argentine sports daily
 - 44 Oratorio solo
 - 46 Family Guy prodigy
 - 48 Word that Christian Malaysians can't

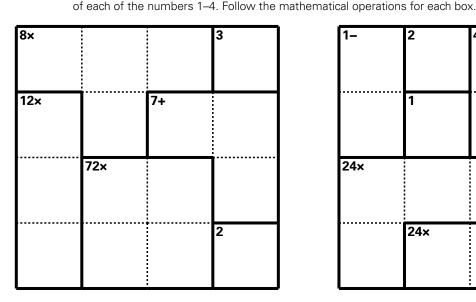
Instructions: Fill in the grids so that each column and row contains exactly one



- 49 Trimming favored by Marie Antoinette
- 51 Leonardo's assistant in J. Edgar
- 52 What a bell buoy warns of
- 53 Saarinen collaborator
- 56 Hardly welcoming
- 59 Drs. may cross them
- 61 Prep for dragging

4 by 4 Techdokus

3-12× 4÷ 6×



3× 24× 24×

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Profs. envision larger edX role

Agarwal, Klopfer consider future of three-year tracks

Online Education, from Page 1

ibility of "reading when I had time and taking tests as scheduled" and the networking opportunities available for in-person classes.

William J. Caruso '18 stated that online classes cannot keep a steady pace and monitor individual students' learning. He stated "discussion boards are unreliable sometimes... you just wanted to speak to the expert."

Caruso added that computer science classes should have an online component, but math classes are not as amenable to online integration. "If you needed to ask a conceptual question [in math] there was no way to do that," said Caruso.

On taking language classes online, Vajapeyajula believes "you don't really learn the pronunciation that well. In class you had more activities and could converse, but online you focused on vocab and grammar; you couldn't focus on speaking." According to Vajapeyajula, humanities classes, which are characteristically more openended and reading/writing-based, are more efficient with an online component.

Amber T. Guo '18, on the other

hand, believes that open-ended classes should not contain an online component. "Online classes grade more trivial areas like grammar, whereas in-person classes grade more the actual expression of an idea," stated Guo.

Agarwal agreed that "different courses might be more amenable to online versus in-person" but doesn't consider it a matter of STEM versus humanities, of theoretical versus applied material, or of any "hard-and-fast dichotomy."

Klopfer said, "MITx rose around STEM learning, so the model seems to fit better for STEM classes, but I don't think that's inherent to MOOCs [massive open online courses] and online learning."

Both professors agree that a student's individual learning style should define how they use the two formats.

While future initiatives of the blended model are uncertain, previous efforts, like the Technology-Enhanced Active Learning (TEAL) system have seen sustained use at MIT. TEAL, the format for the introductory classical mechanics (8.01) and electricity and magnetism (8.02) classes, "incorporates lecture, recitation, and hands-on experiments in one presentation"

and uses online, instant-feedback homework according to its website. Guo said, "the way the TEAL system works is a good way... you actually get through, instead of guessing through and getting it wrong."

The online education pivot may also affect the future of the MIT undergraduate degree. Agarwal believes that an undergraduate degree should not necessarily be just four years of classes. He suggested the following possibility: "three years to get the rich experience, then instead of the last year on campus, go get a job in the industry... feather it out."

Klopfer added, "A year spent online, maybe junior or senior year, with an internship or research project somewhere, and taking courses while you do that, is more viable."

According to Agarwal, improvements can still be made to the online education system. Online classes need what Agarwal called "social learning" — online groups and discussion forums for people working on any given part of the class. Agarwal noted that the main advantage students taking in-person classes still have is "getting to interact in person with faculty — with each other."

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Tuesday, October 14, 2014 The Tech 7

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8 THE TECH
TUESDAY, OCTOBER 14, 2014

Ebola scare triggers outbreak of public anxiety

Suspected cases in Massachusetts are not from deadly virus, but still stir Braintree buzz

Ebola, from Page 1

cannot be spread through the air or water. Instead, people need to have direct physical contact with someone who is already ill or with their bodily fluids. And people are not contagious until they begin to show symptoms.

"This is not something that is going to come at [people] through the air by someone they sat next to on the T who looked perfectly healthy," said Barry, who heads the infectious disease bureau of the Boston Public Health Commission. "Frankly, they are more at risk from influenza."

City officials said they also have plenty of experience dealing with infectious diseases.

Barry declined to talk in detail about the Braintree case or why it

garnered so much media attention, particularly since officials determined within hours that the patient probably did not actually have Ebola.

But Barry said Boston hospitals would "absolutely not" send a potential Ebola patient back to their car to isolate them from other patients, as the Braintree clinic did. She said it is important to not only isolate patients, but also to keep an eye on them.

"I have never in my 31 years of doing this job ever isolated or quarantined someone in a car," she said. Barry added that Boston hospitals "all have appropriate spaces in their facilities where they can both isolate or quarantine people and monitor them."

The US Centers for Disease

Control and Prevention guidelines normally recommend putting a patient suspected of having contracted Ebola in a single patient room with the door closed and making sure that staff who enter the room are wearing protective equipment, including gloves and a face mask.

But Harvard Vanguard Medical Associates, which runs the Braintree clinic, defended its actions Monday, saying its medical team followed procedures that were crafted based on the CDC recommendations.

"The situation was handled well and the patient, who was clinically stable, was quickly ushered out of the building and into his own car to reduce any potential exposure of others," Dr. Ben Kruskal, chief of infectious disease at Harvard Vanguard, said in a statement.

The man came into the Braintree health facility Sunday afternoon and told the medical staff that he had traveled to Liberia, but said he did not know if anyone around him had Ebola, according to Kruskal. He complained of severe headaches and muscle aches, which are consistent with Ebola, but also with many other ailments.

Based on his travel history and symptoms, Kruskal said the medical team suspected he could potentially have Ebola.

The man, who has not been identified, was taken by ambulance to the clinic's partner, Beth Israel Deaconess, where infectious disease specialists examined him and concluded he was at an extremely

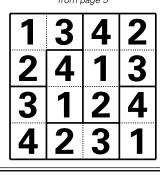
low risk for having Ebola. After initially keeping him in isolation, the hospital definitively ruled out the disease on Monday evening and said he remains in good condition.

But Mayor Joseph C. Sullivan of Braintree said many in town were worried over the weekend that the patient might have spread the disease to local residents before he was taken to the hospital. Sullivan spent much of the weekend trying to squelch rumors that the man lived in Braintree or had children in the schools. The town even issued a reverse 911 call to calm anxious residents.

"The news has created significant Braintree buzz," Sullivan said. Residents "were concerned about the safety of their family and their neighbors."

Solution to Techdoku I

from none



Solution to Techdoku II

from page 5

2	4	1	3
3	7	2	4
4	2	3	1
1	3	4	2

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Solution to Techdoku III

from page 5

Trom page 5					
ည	2	7	4		
2	1	4	3		
4	3	2	1		
1	4	3	2		

Solution to Crossword

From page 5

B A C K S L A S H P L A I T A V A I L A B L E P E N N E W I N D OWB O X P A T N A L A D O N E T W O D E E M S N O O P S H R I V E L U P P P S I E L I R O T H C US S S E A N C E P R O A S P S O L I C I T E A T R C A A L I G H T O S L O B A C A L A O Y S L O P E R E T T A S T E N S E N I S I E E N L A C E A H A A T H O S E L B O W R O O M R O O S T S A L L I E M A E





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ALBUM REVIEW

Definitely not plain sailing

But worth going along for the ride

By Owen Morris

Southern Air, the last album from poppunkers Yellowcard, featured the prominent lyric "I've been here a while/ staring at the screen wondering what I'll write." It's a sentiment I can empathise with. The ninth studio album from the Jacksonville quartet, made famous by their unique guitar-meets-violin rock sound, is the product of many factors, and to address any one without context of the others seems unjust. Music does not exist in a vacuum (technically because there's no air to propagate sound waves, but allow me the metaphor), and this album has a great deal going on behind the scenes.

The previously released single "Make Me So" is probably the strongest of the thirteen tracks.

It's been something of an annus horribilis for Yellowcard. Longtime drummer Longineu W. Parsons III left the band to pursue other interests. Violinist Sean Mackin has been undergoing treatment for thyroid cancer. And lead vocalist Ryan Key married his wife in a hospital, two days after she became paralysed after breaking her back in a snowboarding accident. The sheer existence of this album says something about Yellowcard's commitment to their music and to their fans. But whereas Yellowcard's last few albums have hit a myriad of highs, both musically and emotionally, this is an album about lows.

Album opener "Convocation" sets a melancholy, almost orchestral tone, and shows how much the band have matured since their early days. However, while standout songs like "Transmission Home" and "Crash the Gates" thrash along for most of their

runtime, they often come across as stadium rock by-the-numbers. These tracks and others feature drawn-out interludes with almost nothing going on, as if the band wanted to sound reflective and then became too disheartened to do anything.

The tone of the other songs is either eclectic or inconsistent, depending on your viewpoint. The previously released single "Make Me So" is probably the strongest of the thirteen tracks, and crackles with the punk energy of the band's classic crowd-pleasers. "One Bedroom," another single, is an emotional love letter that still manages to pack a serious punch, primarily thanks to the conviction of Key's vocal track. Title track "Lift a Sail" is similarly poignant ("Feel my heart stop and lift my eyes/ I can't choose when to love/ Or who I am part of") and offers an unguarded glimpse into the inner workings of a tormented heart. In a completely different vein, a guest appearance from the lead vocalist of Memphis May Fire over the driving beat of The Deepest Well works well, making it one of the most interesting songs Yellowcard have produced in recent years. In contrast however, tracks such as "Madrid" and "California" have almost no distinguishing features, and can fall somewhat flat. It can feel like these slower tracks were included simply to break up the tempo and bulk up the runtime of the album. If nothing else however, they emphasise the variety of sounds Yellowcard are prepared to play, and how far they have come since the initial success of their three-chord punk.

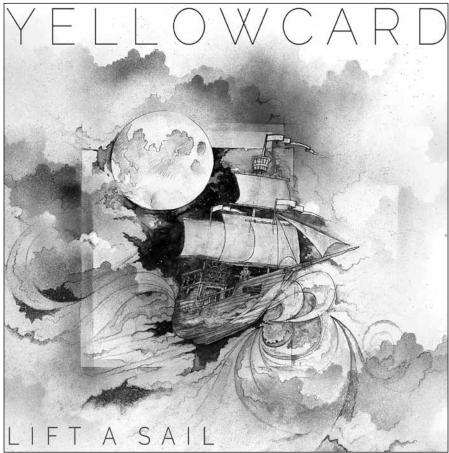
There's a generation of people (an age group well represented here at MIT) for whom Yellowcard have a special resonance. Not a party playlist has ever or will ever be made by a person born around that time that does not feature "Ocean's Avenue." In the decade since that seminal single, Yellowcard have evolved and experimented many times as any band so enduring would. And despite a few misses, they largely make their new direction a success. Judged purely on musi-

cal quality, *Lift A Sail* is worth a listen, and comfortably deserves a place in the Yellow-card catalogue. But as a statement of intent, it could quite possibly be the most important album the band has ever made.

Fans hoping for a simple rehash of their original sound will be sorely disappointed by *Lift A Sail*, and they have the right to dislike the new direction the band have taken. But frankly, Yellowcard has earned the right not to give a shit.

★★★☆
Lift A Sail
Yellowcard
Released October 7, 2014

Razor & Tie



COURTESY OF YELLOWCARD AND RAZOR & TIE

The album cover of Yellowcard's new album Lift A Sail.

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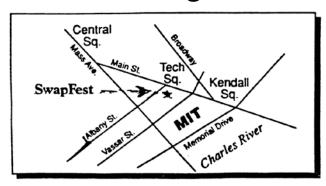
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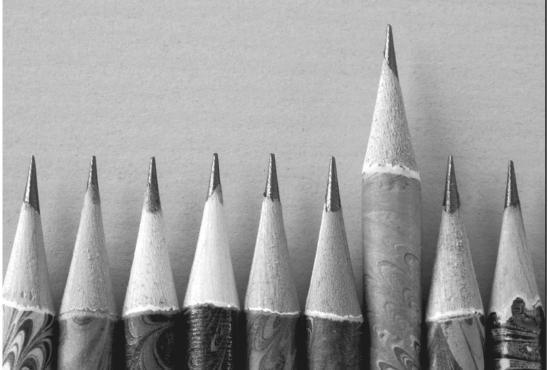
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Women's soccer earns win

Overtime goal lifts MIT past Clark University

By Matthew Noonan

Nicole M. Miko '18 registered her first goal of the season at



98:58 in overtime following a feed from Morgan K. Moroi '16 as the Engineers rallied to defeat Clark University, 2-1, on

Saturday, October 11 in New England Women's and Men's Athletic Conference (NEWMAC) play. With the victory, MIT improves to 8-3-2 overall and 4-0-1 in conference play, while Clark falls to 1-11-0 and 0-4-0.

Ambika M. Krishnamachar '15, Moroi and Olivia M. Struckman '18 combined for four shots in the first half, but the first three attempts sailed wide, while the fourth was deflected by Clark goalkeeper Gabby Paolini. MIT continued to pester the Cougars' backline with additional shots from Moroi and Faith C. OBrian '15, but neither attempt landed in the back of the net. Clark managed to score on their first shot of the contest when Charlotte Mays dribbled into the box and sailed a shot past MIT goalkeeper Lauren S. Ullmann '17 into the far left corner at 20:55.

Clark held a 1-0 advantage heading into the break, but MIT evened the score halfway through the second half when Julia M. Goupil '18 headed in her second goal of the season following a cross from Elena A. Gianotas '15 at 63:17. Moroi and Kathleen H. Chen '17 tried to net the goahead goal at 73:43 and 73:49, but both shots were turned away by Paolini. MIT Michelle Battipaglia '15 also had a chance to push the

visitors ahead with a penalty shot at 89:53, but her shot was stopped by Paolini.

In overtime, the Engineers recorded four consecutive shots before Miko located the back of the net following a pass from Moroi. Miko fired her second shot of the contest toward the upper right corner of the Clark net to seal the win.

MIT outshot Clark, 31-4, and held an advantage in corners, nine to two. Paolino finished with a season-best 16 stops, including seven saves in the second half. Moroi and Krishnamachar combined for 12 shots, including seven directed toward net.

Both teams return to action next Tuesday, October 14 as MIT hosts Wellesley College for a 4:00 p.m. kickoff, while Clark welcomes Springfield College for a 6:00 p.m. start.

Men's soccer team loses to Wheaton

One goal separated the two sides

By Matthew Noonan

Wheaton College's Travis Blair netted the game's lone goal at 10:32 off a penalty kick to provide the No.



17 Lyons a 1-0 victory against MIT on Saturday afternoon at Roberts Field in New England Women's and Men's Athletic Conference (NEW-

MAC) play. With the victory, Wheaton improves to 11-2-1 overall and 4-0-0 in conference play, while MIT falls to 4-4-4 and 1-3-0.

MIT finished the match with eight corners.

Following back-to-back corner kicks by Wheaton's Luke Finkelstein at 3:49 and 4:04 in the first half, the Lyons located the back of the net following a handball against MIT in the box. Blair fired home his 10th goal of the season, sailing his shot to the right of goalkeeper Jake L. Amereno '16.

MIT, which finished with 13 shots, tried to even the score with nine attempts in the first half, but Wheaton goalkeeper Matt Dickey turned away five shots. Chester Chambers '15, Austin E. Freel '16 and Alexander C. McCullumsmith '17 finished the session with three shots, respectively.

Wheaton attempted to grow their lead early in the second half with shots by Finkelstein and Noah Kossoff, but both attempts sailed past the MIT goal. Freel recorded his fourth shot shortly after — a header following a corner kick by Sean D. Bingham '16, that went out of play. Joshua M. Wilson '18 recorded Tech's next shot — an attempt from five yards outside of the box that sailed wide of the Wheaton net.

MIT finished the match with eight corners and Amereno recorded three stops. Wheaton recorded 13 shots and two corners, and Dickey registered six saves.

Both teams return to action Saturday, October 18 as MIT travels to Clark University for a 1:00 p.m. kickoff, while Wheaton hosts Emerson for a 12:00 p.m. start.

UPCOMING HOME EVENTS

Tuesday, October 14

Women's Soccer vs. Wellesley College

Wednesday, October 15

Men's Water Polo vs. Harvard University

7:30 p.m., Zesiger Sports and Fitness Center

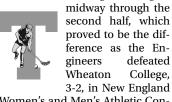
One goal separated MIT from Wheaton College

4 p.m., Steinbrenner Stadium

Goals by Krishnamachar '15, Moroi '16 propel MIT field hockey team to 3-2 victory

By Mindy Brauer

MIT Ambika M. Krishnamachar '15 netted the go-ahead goal



Women's and Men's Athletic Conference (NEWMAC) play on Tuesday afternoon at Mirrione Stadium. With the win, MIT improves to

7-3-2 overall and 3-0-1 in conference play, while Wheaton falls to 7-5-1 and 1-2-0

Following back-to-back shots by Kathleen H. Chen '17 and Michelle Battipaglia '15, Morgan K. Moroi '16 found the back of the net on MIT's third shot of the match at 8:43. Moroi collected a feed in the box from Battipaglia and fired a shot past two Wheaton defenders for her third goal of the season to provide the Engineers with a 1-0 lead

Moroi extended Tech's advantage roughly 10 minutes later when

she directed a shot to the top left corner of the Lyons' cage at 18:56. After recording their second goal, MIT's offense continued to pressure Wheaton's defense with shots by Krishnamachar and Moroi, but two of the attempts were turned away by Wheaton goalkeeper Ali Hinton, while the other shot was blocked

Wheaton sliced the deficit at 30:30 when Laila Razzaghi scored her first goal of the season following a pass from Kaitlin Montoya. Razzaghi located the back of MIT's net by directing a cross from Mon-

toya from the sidelines into the lower right corner. Lauren Corigliano evened the score at 2-2 with her eighth goal of the season at 39:49. Corigliano directed her only shot of the half toward the crossbar that deflected into the Engineers goal.

Krishnamachar pushed MIT ahead for good midway through the second half when she rushed down field, reversed direction in the box and fired a shot past Hinton's fingertips into the right corner at 67:44 for her third goal of the season. Wheaton tried to respond

following Tech's third marker, but their various shots sailed wide.

Wheaton held an advantage in shots, 17-16, and 3-1 margin in corner. Krishnamachar and Wheaton senior Kelsee Howes (Maynard, Mass.) recorded six shots, respectively. MIT goalkeeper Lauren S. Ullmann '17 turned away four shots, while Hinton recorded three saves.

Both teams return to action on Saturday, October 11 at 1:00 p.m. as MIT travels to Clark University, while Wheaton heads to Springfield College.

Women's volleyball bests Wellesley in fifth set

Tuesday, October 7 win was the first regular-season victory over Wellesley since 2009

Volleyball, from Page 12

kill by Gebhard. An error and a kill kept the Blue alive but another strike from Gebhard capped off the set.

Trailing 6-1 in the second stanza, Wellesley rattled off the next five points. A trio of hitting miscues along with a kill from Gebhard gave the Engineers some breathing room at 10-6. The Blue responded with a 10-2 run

that was fueled by strong blocking as it went in front, 16-12. MIT battled back as two Farley aces tied the score at 16 and resulted in a Wellesley timeout. Following the break, the hosts won the next three points and eventually held a 24-20 lead. The Engineers replied by claiming six straight points to complete the come-from-behind victory.

some breathing room at 10-6. The Blue raced out to a 17-6 gether a 5-2 spurt for its largest extended the set for the Blue but lead of the frame. An exchange an Astrachan strike coupled with

maintained a comfortable cushion throughout the frame. MIT trimmed the deficit to seven on three occasions, the last at 22-15. Wellesley capitalized on two errors and an ace to capture the win

The fourth set was a back-andforth affair as it featured 14 ties and seven lead changes. With the score tied at 14, the Blue put together a 5-2 spurt for its largest lead of the frame. An exchange of points ensued until a kill from Davanzo and an ace by Farley brought the Engineers within one (21-20). After its own timeout, Wellesley produced back-to-back kills which prompted MIT to call a timeout. Once action resumed, Astrachan tallied three kills as Meryl E. Gibbs '16 added one of her own to put the Engineers ahead, 24-23. A block and a kill extended the set for the Blue but an Astrachan strike coupled with

a hitting error kept MIT in front. Wellesley responded with three kills in a row to force the decisive final set.

The Engineers picked up the first five points of the fifth set and later held an 8-1 lead at the changeover. After switching sides, MIT outscored the Blue, 7-3, as an Astrachan kill ended the night.

MIT continues NEWMAC play on Thursday, Oct. 9 when it hosts Wheaton College.

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12 THE TECH
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TRISTAN HONSCHEID—THE TECH

Colin Godwin '17 crosses the finish line at the NEICAAA Championships at Franklin Park in Boston on Saturday. The MIT Men's Varsity Team placed ninth out of 39 teams.

MIT overcomes Wellesley in tie-break set to earn victory

Tech records first win against Wellesley since 2009

By Mindy Brauer

The MIT women's volleyball team outlasted Wellesley College

for a 25-17, 26-24, 15-25, 26-28, 15-4 victory in a NEWMAC match on Tuesday night. In the Engineers' first regularseason win over the

Blue since 2009, Jennifer L. Astrachan'15 led all players with 27 kills on a .338 hitting performance in addition to recording three aces for the Cardinal and Gray (18-2, 5-1 NEWMAC).

Megan E. Gebhard '17 posted 15 kills as Allison A. Davanzo '18 tallied eight kills, a .304 hitting percentage, four blocks, and two aces for MIT. Nicole C. Gagnier '15 totaled 53 assists and four blocks while Tori L. Wuthrich '17 amassed a match-high 23 digs to go along with two aces. Jennifer A. Glerum '17 collected 16 digs as Clare Farley '18 rounded out the squad with nine digs and five aces.

MIT built a 7-3 lead in the



ALEXANDER C. BOST—THE TECH

Allison A. Davanzo '18 leaps to spike the ball during MIT's 3-0 sweep of Wheaton College on Thursday night.

opening set but Wellesley closed to gap to 8-6. The Engineers responded with an 8-3 run; however, the hosts trimmed their deficit to 17-13. MIT countered with a 7-2 run, reaching set point on a

Volleyball, Page 11

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